

### REMARKS

Prior to this Response,  
a final Office Action was issued, mailed September 26, 2001.

In the Office Action,  
claims 1-12 were rejected by the Examiner.

In this After Final Response:  
independent claims 1, 7 have been amended.

Claims 1-12 are still pending in the present application. Reconsideration is requested. In addition to the above amendments, the Applicant makes the following remarks regarding individual issues:

\* The Applicant's time to respond.

The last Office Action was mailed on September 26, 2001. The 3-month initial deadline for responding without having to pay a penalty fee ends on December 26, 2001.

In determining whether this document is timely filed, the U.S.A. Patent Office is asked to note the Applicant's Certificate of Mailing in conjunction with 37 C.F.R. section 1.8. That is notwithstanding when the present document is actually received by the U.S.A. Patent Office.

\* The rejection based on 112

Claims 1 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection has been overcome by amendment to the claims. The amendment was to clear up the ambiguity that the Examiner pointed out.

As such, it is respectfully requested that this rejection be withdrawn.

\* The 103 rejection

Claims 1-12 are rejected under 35 U.S.C 103(a) as being unpatentable over the Applicant's Admitted Prior Art (APA) in view of Puharich (US 3,586,791) OR Loeb (US 5,571,148).

The rejection is respectfully traversed. The Examiner repeats the prior arguments, which the Applicant has refuted.

In sustaining the rejections, Examiner writes that the Applicant's refutations are found "unpersuasive". In so doing, the Examiner quoted only selectively words from the applicant's arguments. Stripping some words from their context is an attempt to eviscerate the meaning of the argument.

For a first example, in page 5, second line of par. 2, of the Office Action, the underlined quotation ends at "Of the Cochlea". The quotation stops short of including "with supersonic...". That selective omission mischaracterizes the applicant's arguments for the record.

For a second example, in page 6, third line of the Office Action, the quotation starts with "... nerves". The omitted previous word (for which the "..." is written) is "facial"! Had it been included, the applicant's arguments would not have been thus mischaracterized for the record.

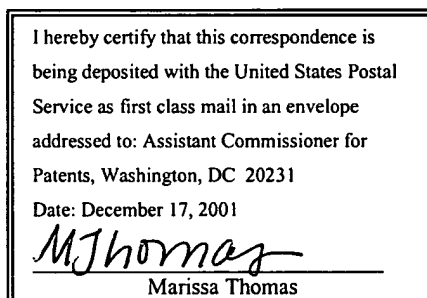
As such, it is respectfully requested that this rejection be withdrawn.

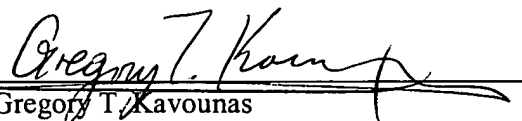
CONCLUSION

The Applicant respectfully requests that this amendment be entered, and that the application is in condition for allowance. If not, the same will be argued at the Appeal.

Respectfully submitted,

**MARGER JOHNSON & McCOLLOM, P.C.**



  
Gregory T. Kavounas  
Reg. No. 37,862

MARGER JOHNSON & McCOLLOM  
1030 SW Morrison Street  
Portland, OR 97205  
(503) 222-3613

Amendments to the claims

**APPENDIX**

1. (Twice Amended) A method for stimulating a human cochlea in response to a sound, comprising:
  - generating an electrical sound signal in response to the sound;
  - generating an electrical analog carrier signal having a frequency greater than 20 kHz;
  - modulating the carrier signal with the sound signal to generate a modulated signal; and
  - applying [the carrier signal and] the modulated signal to an electrode that is coupled with the cochlea such that carrier signal is applied to the cochlea.
2. The method of claim 1, wherein modulating is by amplitude modulation.
3. The method of claim 1, wherein modulating is by frequency modulation.
4. The method of claim 1, wherein the electrical analog carrier signal has a frequency of at least 32 kHz.
5. The method of claim 4, wherein modulating is by amplitude modulation.
6. The method of claim 4, wherein modulating is by frequency modulation.
7. (Twice Amended) A cochlear implant system for a patient's cochlea comprising:
  - at least one electrode for coupling with the patient's cochlea;
  - an internal coil for implanting in the patient to drive the electrode;
  - a microphone for outputting electrical sound signals in response to external sounds;

an oscillator for generating an electrical analog carrier signal having a frequency greater than 20 kHz;

a modulator for modulating the carrier signal with the sound signals to generate a modulated signal; and

an external coil for magnetically coupling [the carrier and] the modulated signal to the internal coil such that the carrier and the modulated signal are applied to the cochlea.

8. The system of claim 7, wherein the modulator is an amplitude modulator.

9. The system of claim 7, wherein the modulator is a frequency modulator.

10. The system of claim 7, wherein the electrical analog carrier signal has a frequency of at least 32 kHz.

11. The system of claim 10, wherein the modulator is an amplitude modulator.

12. The system of claim 10, wherein the modulator is a frequency modulator.